

## ON A COLLECTION OF BATRACHIA AND REPTILIA FROM SOUTHWEST MISSOURI.

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The zoology of the Ozark Mountain country is less known than that of some more remote regions of our country. The fishes have, however, been pretty fully investigated by the ichthyologists of the United States Fish Commission, and the mammals are now claiming the attention of the zoologists of the Bureau of Animal Industry of the United States Agricultural Departments. In the present paper I contribute something to the knowledge of the herpetology of the region.

## BATRACHIA.

*Amblystoma punctatum* L.

*Spelerpes maculicaudus* Cope,

*Spelerpes melanopleurus* sp. nov.

This species is near to the *S. bilineatus* Green, but differs in both proportions and coloration, and is also smaller, being the least species of the genus. I took five specimens among the stones on the banks of Raley's Creek, one of the head tributaries of the White River.

The width of the head enters the length to the groin 4·5 times (nearly 6 times in *S. bilineatus*), and the length to the axilla enters the same 2·3 to 2·5 times (2·7 times in *S. bilineatus*). The limbs and all the toes are well-developed, and the anterior and posterior meet when applied to the side of the body; they are separated by three full intercostal spaces in *S. bilineatus*. There are always only 13 costal grooves (14 in *S. bilineatus*). Tail strongly compressed. The sides of the head, body and tail are black, with generally sparse white spots; the upper border of this band is darkest, representing the dorsolateral line of *S. bilineatus*. A few black spots along median dorsal line. End of muzzle and chin black. Limbs closely reticulated with black. Belly white in life (yellow in *S. bilineatus*). Measurements of largest specimen: length to angle of lower jaw, 4·5 mm.; do. to axilla, 10 mm.; do. to groin, 23 mm.; do. to end of tail, 57·5 mm.; do. of fore-limb, 6·5 mm.; do. of hind limb, 8 mm.

Although this species is smaller than *S. bilineatus*, it is more robust and less sepsiform in its proportions. In life, the white belly constitutes a conspicuous color-character.

*Typhlotriton spelæus* Stejneger, Proceeds U. S. Natl. Museum, Vol. XV, 1893.

I obtained several specimens of this interesting species from the proprietor of the Marble Cave, Mr. T. Powell. In spirits it has a pale yellow color, as described by Dr. Stejneger, but in life it is white. It occurs in a stream that flows at least 300 feet below the surface. I examined this and other parts of the cave, which is a very extensive one, and observed very little life in it. It seems difficult to understand how the salamander, which is by no means small, could find subsistence, but Mr. Powell states that a species of "fly" inhabits the cave, and is sometimes very abundant.

The vertebrae, as observed by Stejneger, are opisthocœlous, although the ball of the centrum remains cartilaginous. The tarsus is cartilaginous, although the elements are distinct. These consist, as in *Desmognathus*, of uluare, intermedium, radiale, centrale, and five tarsalia, of which the first is on the inner border of the sole. The location of the genus *Typhlotriton* in the Desmognathidæ by Stejneger is thus justified, and the addition of the genus *Thorius* to the same family, as proposed by Boulenger, is sustained.

The temporal muscle divides a short distance above its insertion in the coronoid process of the mandible after passing under a malar ligament. The inferior and most robust belly is attached to the inferior part of the parietal bone. The superior and more slender belly passes over the parietal bone, lying in a groove between the inferior belly and the low sagittal angle of the skull, and is inserted into the spine of the atlas vertebra, as is the case in the genus *Desmognathus*. It differs from the corresponding muscle in *Desmognathus* in not developing a tendon where it passes over the parietal bone, the point of insertion into the atlas only showing this character.

## REPTILIA.

*Sceloporus undulatus* Daud.

*Crotaphytus collaris* Say. *C. baileyi* Stejneger, North American Fauna, 1890, p. 103.

This species is quite abundant near Galena, Missouri. It has not been hitherto noted as existing in Missouri, the nearest localities recorded being the Neosho River, I. T., and the Arkansas River in Western Arkansas.

*Ophisaurus ventralis* Daud.  
*Eumeces fasciatus* L.  
*Carphophiops vermis* Kenn.  
*Ophibolus doliatus doliatus* L.  
*Ophibolus getulus sayi* Holbr.  
*Coluber confinis* B. & G.  
*Coluber obsoletus* Say.  
*Bascanium flagelliforme* Catesby.

I have no previous record of this species from Missouri, the nearest approach being the Red River in southern Arkansas.

*Storeria dekayi* Holbrook.  
*Natrix fasciata sipedon* L.  
*Eutaenia sirtalis sirtalis* L.  
*Ancistrodon contortrix* L.  
*Crotalus horridus* L.